

Regional HIV/AIDS Epidemiologic Profile of Barnstable County, Massachusetts: 2012

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases who were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2012, this resulted in the removal of 2,924 HIV/AIDS cases, of which 808 have died and 2,116 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2011: Barnstable County, Massachusetts²

	N	%
People Living with HIV/AIDS	644	61%
People Reported with HIV or AIDS who are Deceased	415	39%
Total Number of People Reported with HIV Infection or AIDS	1,059	100%
¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999 ² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12		

Table 2. Average annual rate of HIV infection diagnosis from 2008 to 2010 and HIV/AIDS prevalence rate on 12/31/11¹: Barnstable County, Massachusetts²

Average annual HIV diagnosis rate from 2008–2010	Average rate per 100,000	Average annual number of HIV diagnoses
Barnstable County, MA	11.0	23.7
Massachusetts Total	10.3	664.7
HIV/AIDS prevalence rate on 12/31/11	Rate per 100,000	Number of people living with HIV/AIDS
Barnstable County, MA	298.3	644
Massachusetts Total	277.5	18,170
¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation. ² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12		

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2001–2010, Barnstable County, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2001	434	13	35
2002	454	12	32
2003	474	11	31
2004	491	7	24
2005	509	8	26
2006	541	3	35
2007	562	4	25
2008	581	4	23
2009	601	3	23
2010	620	6	25

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

Table 4. People diagnosed with HIV infection from 2008–2010¹ and people living with HIV/AIDS on December 31, 2011 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Barnstable County, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	61	86%	563	87%
Female	10	14%	81	13%
Place of Birth:	N	%	N	%
US	62	87%	558	87%
Puerto Rico/US Dependency ³	0	0%	6	1%
Non-US	9	13%	80	12%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	60	85%	542	84%
Black (non-Hispanic)	7	10%	46	7%
Hispanic/Latino	-- ⁷	-- ⁷	-- ⁷	-- ⁷
Asian/Pacific Islander	-- ⁷	-- ⁷	-- ⁷	-- ⁷
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	50	70%	466	72%
Injection Drug Use (IDU)	-- ⁷	-- ⁷	48	7%
MSM/IDU	5	7%	-- ⁷	-- ⁷
Heterosexual Sex	6	8%	39	6%
Other	0	0%	-- ⁷	-- ⁷
Total Undetermined	-- ⁷	-- ⁷	58	9%
• Presumed Heterosexual Sex ⁴	-- ⁷	-- ⁷	20	3%
• Undetermined ⁵	5	7%	38	6%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2011	
Under 13	0	0%	0	0%
13 to 19	-- ⁷	-- ⁷	-- ⁷	-- ⁷
20 to 24	5	7%	-- ⁷	-- ⁷
25 to 29	-- ⁷	-- ⁷	10	2%
30 to 34	7	10%	22	3%
35 to 39	10	14%	38	6%
40 to 44	15	21%	76	12%
45 to 49	10	14%	138	21%
50 to 54	12	17%	144	22%
55 to 59	-- ⁷	-- ⁷	105	16%
60+	3	4%	109	17%
Total⁶	71	100%	644	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-eight percent of people diagnosed with HIV infection from 2008–2010 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁷ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 5. People living with HIV/AIDS on December 31, 2011 by gender and race/ethnicity: Barnstable County, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	483	86%	59	73%
Black (non-Hispanic)	34	6%	12	15%
Hispanic/Latino	40	7%	6	7%
Total²	563	100%	81	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Total includes Asian/Pacific Islander, American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 6. People living with HIV/AIDS on December 31, 2011 by gender and exposure mode: Barnstable County, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	466	83%	N/A	N/A
Injection drug use (IDU)	27	5%	21	26%
MSM/IDU	29	5%	N/A	N/A
Heterosexual sex	-- ⁴	-- ⁴	32	40%
Other	-- ⁴	-- ⁴	-- ⁴	-- ⁴
Total Undetermined	31	6%	-- ⁴	-- ⁴
• Presumed heterosexual sex ²	N/A	N/A	20	25%
• Undetermined ³	31	6%	-- ⁴	-- ⁴
Total	563	100%	81	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Barnstable County, Massachusetts¹, 2001–2010²

	Male		Female		Total
	N	%	N	%	
2001	30	86%	5	14%	35
2002	25	78%	7	22%	32
2003	28	90%	3	10%	31
2004	23	96%	1	4%	24
2005	24	92%	2	8%	26
2006	29	83%	6	17%	35
2007	23	92%	2	8%	25
2008	20	87%	3	13%	23
2009	20	87%	3	13%	23
2010	21	84%	4	16%	25

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Barnstable County, Massachusetts¹, 2001–2010²

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Asian/Pacific Islander		Total ³
	N	%	N	%	N	%	N	%	N
2001	28	80%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	0	0%	35
2002	23	72%	-- ⁴	-- ⁴	6	19%	-- ⁴	-- ⁴	32
2003	27	87%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	0	0%	31
2004	14	58%	-- ⁴	-- ⁴	5	21%	-- ⁴	-- ⁴	24
2005	21	81%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	0	0%	26
2006	26	74%	5	14%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	35
2007	17	68%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	0	0%	25
2008	18	78%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	0	0%	23
2009	19	83%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	0	0%	23
2010	23	92%	-- ⁴	-- ⁴	0	0%	-- ⁴	-- ⁴	25

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Totals include American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Barnstable County, Massachusetts¹, 2001–2010²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2001	30	86%	0	0%	5	14%	35
2002	29	91%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	32
2003	24	77%	0	0%	7	23%	31
2004	18	75%	0	0%	6	25%	24
2005	23	88%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	26
2006	25	71%	0	0%	10	29%	35
2007	21	84%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	25
2008	19	83%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	23
2009	20	87%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	23
2010	23	92%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	25

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Barnstable County, Massachusetts¹, 2001–2010²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2001	22	63%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	35
2002	21	66%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	32
2003	20	65%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	0	0%	6	19%	31
2004	17	71%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	24
2005	18	69%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	0	0%	-- ⁵	-- ⁵	26
2006	25	71%	-- ⁵	-- ⁵	0	0%	0	0%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	35
2007	19	76%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	0	0%	25
2008	15	65%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	23
2009	18	78%	0	0%	0	0%	-- ⁵	-- ⁵	0	0%	0	0%	-- ⁵	-- ⁵	23
2010	17	68%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	0	0%	25

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Barnstable County, Massachusetts¹, 2001–2010²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2001	12	35	34%
2002	14	32	44%
2003	16	31	52%
2004	12	24	50%
2005	8	26	31%
2006	12	35	34%
2007	11	25	44%
2008	9	23	39%
2009	7	23	30%
2010	7	25	28%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Barnstable County, Massachusetts,¹ 2008–2010²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	21	61	34%
Female	2	10	20%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	18	60	30%
Black (non-Hispanic)	-- ⁵	-- ⁵	-- ⁵
Hispanic/Latino	-- ⁵	-- ⁵	-- ⁵
Asian/Pacific Islander	0	0	0%
Other/Undetermined ³	0	0	0%
Place of Birth:	N	N	%
US	18	62	29%
Puerto Rico/US Dependencies ⁴	0	0	0%
Non-US	5	9	56%
Total	23	71	32%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2008–2010 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12